



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/582,100

06/08/2006

Toyoaki Suzuki

0171-1284PUS1

1164

2292 7590 08/21/2009
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

YAGER, JAMES C

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

08/21/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/582,100	Applicant(s) SUZUKI ET AL.	
	Examiner JAMES YAGER	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060608 & 20090812</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. Regarding the Information Disclosure Statement dated 08 June 2006, the reference JP-5-5138-U was not considered because no translation has been provided.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5, the phrase "ratio of 1 to 10 wt%" renders the claim indefinite because it is unclear what is meant by this phrase. Does applicant mean amount of 1 to 10 wt%?

Claim Rejections - 35 USC § 102/103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1794

A person shall be entitled to a patent unless –

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1, 2, 4 and 6-8 are rejected under 35 U.S.C. 102(a) or (e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Saito et al. (US 2004/0137177).

Regarding claims 1, 2, 4 and 6-8, Saito discloses a multi-chamber container comprising a resin film or sheet formed into a bag (i.e. a compartmented container to hold two or more contents separately in individual compartments, which is formed from a resin film or sheet) ([0001]) comprising a heat seal layer as the innermost layer (i.e. having a heat-sealable layer on at least one side thereof so that the heat-sealable layer constitutes the inner walls of said container) ([0063]), wherein the bag comprises strong sealed portions and a weak sealed portion (i.e. the opposing inner walls are heat-sealed partially and peelably to form the weakly sealed part which divides the inside of the container into compartments) ([0079], Fig. 1, 3a-3c (strong sealed portions), 4 (weak sealed portion)), wherein the heat-sealed portion comprises a propylene-based resin produced by a two stage polymerization wherein propylene and α -olefin other than propylene having 2 to 8 carbon atoms are supplied at the first stage in the presence of an organoaluminum compound catalyst thereby producing a component (A) successively at the second stage, propylene and ethylene, or propylene, ethylene and the α -olefin are supplied and copolymerized in the presence of the organoaluminum

Art Unit: 1794

compound catalyst to produce the component (B) (i.e. wherein said heat-sealable layer is formed from a composition of propylene copolymer composed of the following components (A) and (B), wherein Component (A): a propylene copolymer composed of propylene and C.sub.4-8 α -olefin; Component (B): a propylene copolymer composed of propylene and ethylene and/or C.sub.4-8 α -olefin) ([0013]-[0015], [0048], [0056]), wherein component (A) is contained in an amount of 10 to 60% by weight and component (B) is contained in an amount of 40 to 90% by weight (i.e. clearly overlapping the claimed ratio of from 98:2 to 50:50 by weight) ([0013]), wherein the laminated film or sheet comprising the bag may have a three layer structure wherein the heat seal layer is the innermost layer, an intermediate layer and an outer most layer are present (i.e. wherein the resin film or sheet has a laminated structure of at least three layers, including heat-sealable layer, intermediate layer, and the outermost layer) ([0063]), wherein the weak sealed portion has a 180° peel strength of 0.2 to 2 kgf/15mm (1.96 – 19.61 N/15mm) (i.e. clearly overlapping the heat seal strength of 1-6 N/15mm, 1-3 N/15mm or 3-6 N/15mm) and the strong sealed portions have a 180° peel strength of 3 to 6 kgf/15 mm (29.42 – 58.84 N/15mm) (i.e. heat seal strength of not lower than 25 N/15mm when tested (for 180° peeling)).

Although Saito does not disclose that the heat seal strength is measured according to JIS Z0238 as presently claimed, absent evidence of criticality regarding how the strength is measured and given that Saito discloses strength within the range presently claimed, it is clear that Saito meets the limitations of claim 8.

It is the examiner's position that given that Components (A) and (B) are of identical composition and are produced by an identical two-stage polymerization using an identical organoaluminum compound catalyst as the instantly claimed Components (A) and (B), that Component (A) of Saito will inherently give such a specific ratio of the amount of elution measured by the temperature rising elution fractionation method (at temperatures ranging from 0°C to 140°C with o-dichlorobenzene as a solvent) that the ratio of the amount of elution at 0°C to the whole amount of elution is not less than 15 wt% and not more than 50 wt%, and the ratio of the amount of elution at 60°C to 90°C to the whole amount of elution is not less than 5 wt% and less than 15 wt%, and that Component (B) of Saito will inherently give such a specific ratio of the amount of elution measured by the temperature rising elution fractionation method (at temperatures ranging from 0°C to 140°C with o-dichlorobenzene as a solvent) that the ratio of the amount of elution at 0°C to the whole amount of elution is not less than 0 wt% and not more than 25 wt%, and the ratio of the amount of elution at 60°C to 90°C to the whole amount of elution is not less than 15 wt% and not more than 15 wt%.

It is the examiner's position that given that the container of Saito is identical in structure and composition to the instantly claimed container, the container of Saito will inherently give a total light transmittance not lower than 80% and a haze value not higher than 25% when tested according to JIS K7105 immediately after sterilization at 121°C for 30 minutes.

Given that Saito discloses a copolymer comprising propylene and α -olefin other than propylene having 2 to 8 carbon atoms, which clearly overlaps the claimed range of

Art Unit: 1794

C.sub.4-8 α -olefin, the examiners position that Saito anticipates the claims.

Alternatively, given the overlap of ranges of carbon atoms in Saito and the range presently claimed, it would have been obvious to one of ordinary skill in the art to choose an α -olefin with any number of carbons in the range of Saito, including ones with 4-8 carbons as instantly claimed.

Given that the weakly sealed portion of Saito comprises a narrow strip and given that the heat seal layers form the innermost layer of the bag and are sealed to each other to form the weak sealed portion ([0063], [0079], Fig 1, 4), it is the examiners position that the weakly sealed party is formed by heat sealing with an easy peel tape inserted between the opposing inner walls, said tape having as the surface layer a heat-sealable layer composed of said composition of propylene copolymer.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 1794

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 3, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. (US 2004/0137177).

Regarding claim 3, Saito discloses all of the claim limitations as set forth above. Attention is drawn to [0144] which discloses an embodiment of the container of Saito, wherein the container has a port comprising polypropylene.

While Saito discloses a container having a port comprising polypropylene, there is no disclosure of a container with such port with the specific heat-seal layer made of the propylene α -olefin copolymer as presently claimed. However, this is only one specific embodiment of Saito. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the container using the propylene α -olefin copolymer having this port.

Regarding claim 9, Saito discloses all of the claim limitations as set forth above. Saito does not disclose that the container capacity is smaller than 500 mL.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the container of Saito having any capacity depending on the end use of the container.

Change in size and shape is not patently distinct over the prior art absent persuasive evidence that the particular configuration of the claimed invention is significant. See *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). MPEP 2144.04[R-1].

Regarding claim 10, Saito discloses all of the claim limitations as set forth above. Attention is drawn to [0146] which discloses an embodiment of the container of Saito, wherein the container has a capacity of 2,000 ml.

While Saito discloses a container having a capacity of 2000 ml, there is no disclosure of a container with such capacity with the specific heat-seal layer made of the propylene α -olefin copolymer as presently claimed. However, this is only 1 specific embodiment of Saito. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the container using the propylene α -olefin copolymer having this capacity.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the container of Saito having any capacity depending on the end use of the container.

Change in size and shape is not patently distinct over the prior art absent persuasive evidence that the particular configuration of the claimed invention is significant. See *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). MPEP 2144.04[R-1].

14. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. (US 2004/0137177), as applied to claim 1 above, in further view of Mueller (2006/0093765).

Regarding claim 2, Saito discloses all of the claim limitations as set forth above. Saito does not disclose that the weakly sealed part is formed by heat sealing with an easy peel tape inserted between the opposing inner walls, said tape having as the surface layer a heat-sealable layer composed of said composition of propylene copolymer.

Mueller discloses a multi-compartment pouch (i.e. a compartmented container to hold two or more contents separately in individual compartments) having a frangible seal comprised of two strips of thermoplastic material that are disposed in the interior of the pouch and are heat sealed to each other (i.e. the weakly sealed part is formed by heat sealing with an easy peel tape inserted between the opposing inner walls, said tape having as the surface layer a heat-sealable layer) ([0007], [0021], [0029]). Mueller discloses that using separate materials to create the frangible seal rather than creating the frangible seal by direct attachment of the front and rear sheets helps to control the resulting properties of the frangible seal without having to compromise film properties

Art Unit: 1794

that are associated with the front and rear sheet, such as perimeter seal strength, optical properties, stiffness and the like ([0027]).

Saito and Mueller are analogous art because they both teach about compartmentalized containers having weakly sealed portions that are heat sealed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the heat seal layer of Saito in the form of a tape as disclosed by Mueller to create the weak sealed portion in order to provide the advantage of helping to control the resulting properties of the frangible seal without having to compromise film properties that are associated with the front and rear sheet, such as perimeter seal strength, optical properties, stiffness and the like.

15. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. (US 2004/0137177), as applied to claim 1 above, in further view of Osame et al. (US 6,663,940).

Regarding claim 5, Saito discloses all of the claim limitations as set forth above. Saito does not disclose that the composition of propylene copolymers contains a styrene elastomer with a styrene content of not more than 25 wt% in a ratio of 1 to 10 wt%.

Osame discloses a multilayer sealant film for packaging such as a bag (i.e. a container) (C1/L6-11; Fig. 5B) comprising a seal side layer comprising a copolymer of propylene and α -olefin monomers (C3/L63 - C4/L15) and further comprising 5 to 15% by weight of a thermoplastic elastomer such as SEBS with the amount of styrene copolymerized ranging from 10 to 20% by weight to provide good transparency and

Art Unit: 1794

good impact resistance at low temperatures (i.e. wherein the composition of propylene copolymers contains a styrene elastomer with a styrene content of not more than 25 wt%) (i.e. clearly overlapping in a ratio of 1 to 10 wt%) (C4/L56-67; C5/L32-40).

Saito and Osame are analogous art because they both teach about containers comprising multi-layer resin films comprising heat-seal layers comprising copolymers of propylene and α -olefin monomers. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the 5 to 15% by weight of a thermoplastic elastomer such as SEBS with the amount of styrene copolymerized ranging from 10 to 20% of Osame into the heat-seal layer of Saito in order to provide good transparency and good impact resistance at low temperatures.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES YAGER whose telephone number is (571)270-3880. The examiner can normally be reached on Mon - Fri, 7:30am-5pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JY 8/6/09

/Rena L. Dye/
Supervisory Patent Examiner, Art Unit 1794